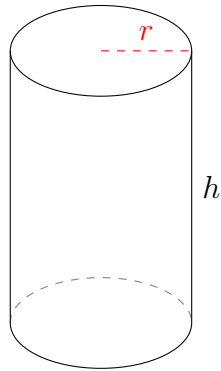


# Area and Volume of Cylinders (A)

Calculate the surface area and volume for each cylinder.

$$\text{Surface Area} = (\pi r^2 \times 2) + (\pi d \times h) \quad \text{Volume} = \pi r^2 \times h \quad d = 2r$$

1.

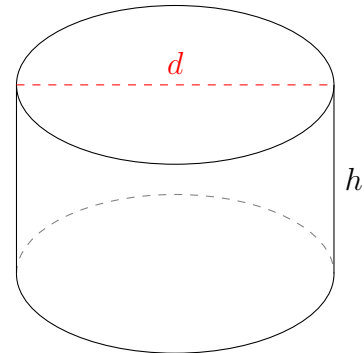


$$r = 1.2 \text{ km} \quad h = 3.6 \text{ km}$$

Surface Area =

Volume =

2.

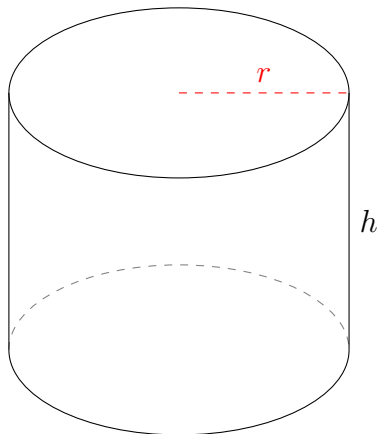


$$d = 12.6 \text{ cm} \quad h = 7.5 \text{ cm}$$

Surface Area =

Volume =

3.

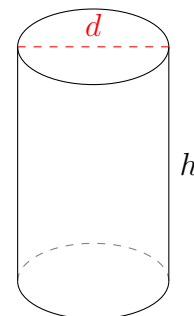


$$r = 18 \text{ ft} \quad h = 27.2 \text{ ft}$$

Surface Area =

Volume =

4.



$$d = 12 \text{ m} \quad h = 18.6 \text{ m}$$

Surface Area =

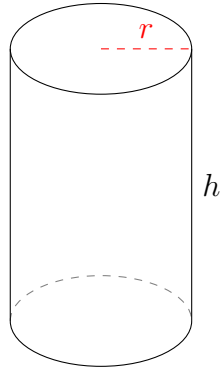
Volume =

# Area and Volume of Cylinders (A) Answers

Calculate the surface area and volume for each cylinder.

$$\text{Surface Area} = (\pi r^2 \times 2) + (\pi d \times h) \quad \text{Volume} = \pi r^2 \times h \quad d = 2r$$

1.

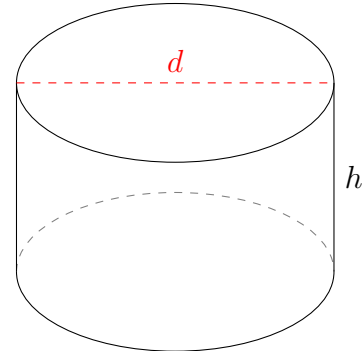


$$r = 1.2 \text{ km} \quad h = 3.6 \text{ km}$$

$$\text{Surface Area} = 36.19 \text{ km}^2$$

$$\text{Volume} = 16.29 \text{ km}^3$$

2.

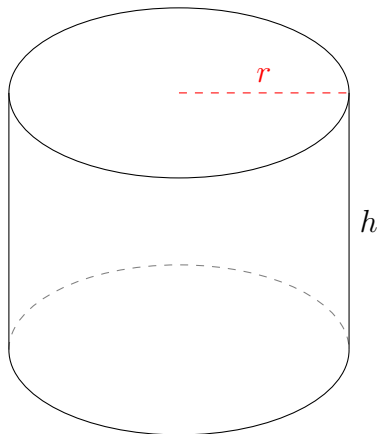


$$d = 12.6 \text{ cm} \quad h = 7.5 \text{ cm}$$

$$\text{Surface Area} = 546.26 \text{ cm}^2$$

$$\text{Volume} = 935.17 \text{ cm}^3$$

3.

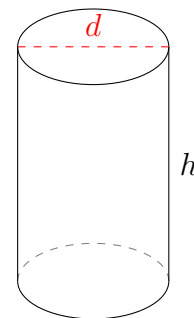


$$r = 18 \text{ ft} \quad h = 27.2 \text{ ft}$$

$$\text{Surface Area} = 5112 \text{ ft}^2$$

$$\text{Volume} = 27,686.23 \text{ ft}^3$$

4.



$$d = 12 \text{ m} \quad h = 18.6 \text{ m}$$

$$\text{Surface Area} = 927.4 \text{ m}^2$$

$$\text{Volume} = 2103.61 \text{ m}^3$$